



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,224	07/18/2003	Steven J. Iseberg	10841US07	4645
23446	7590	01/26/2006	EXAMINER	
MCANDREWS HELD & MALLOY, LTD			LE, HUYEN D	
500 WEST MADISON STREET				
SUITE 3400			ART UNIT	PAPER NUMBER
CHICAGO, IL 60661			2646	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/622,224	ISEBERG ET AL.	
	<b>Examiner</b> HUYEN D. LE	<b>Art Unit</b> 2646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 27 July 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 59-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 59-75 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
- 1.) Certified copies of the priority documents have been received.
- 2.) Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### *Reissue Applications*

1. The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following:

The declaration fails to identify at least one error which is relied upon to support the reissue application. See 37 CFR 1.175(a)(1) and MPEP § 1414. The Declaration filed 07/27/05 is defective because it fails to identify at least one error being relied upon as a basis for the reissue. Specific changes or amendments to the claims must be identified. If new claims are presented, their differences from the original claims must be pointed out.

The declaration filed on 07/18/2003 shows that the specification of the reissue application was filed on January 21, 2000 as United States Reissue Application Number 09/489,441. However, the declaration filed on 07/27/2005 indicates that the specification of the reissue application was filed on July 18, 2003 as United States Reissue Application Serial Number 10/622,224. The Applicant is required to clarify the Application Number for the specification of the reissue application.

2. In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

Claims 59-75 are rejected as being based upon a defective reissue application under 35 U.S.C. 251. See 37 CFR 1.175. The nature of the defect is set forth above.

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251. An example of acceptable language to be used in the supplemental oath/declaration is as follows:

“Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant.”

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 74 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original specification does not disclose that the hollow tubular portion is non-cylindrical.

3. Claim 74 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear how the hollow “tubular” portion is “non-cylindrical”.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 59, 67, 68 and 73-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey (U.S. patent 2,430,229).

Regarding claims 59 and 73, Kelsey teaches an insert earphone that comprises a housing (13, 13A, 13B, 13C, 13D) having a hollow tubular portion (figure 5), a receiver (15), a resilient sealing member (10, 10A, 10B, 10C, 10D) as claimed (figure 11). The insert earphone extends

into and substantially acoustically sealing the ear canal of the wearer as claimed (figure 11 and see page 3, lines 40-49).

As shown in the drawings, the earphone of Kelsey does not require a long flexible tube between the hollow tubular portion of the housing and the resilient sealing member.

Kelsey does not specifically teach that the earphone provides a high fidelity response as claimed. However, connecting a hearing aid to any communication system such as a high fidelity system or connecting a hearing aid to a circuitry or an amplifier for providing an output signal with relatively high fidelity is known in the art.

Therefore, it would have been obvious to one skilled in the art to connect the hearing aid of Kelsey to any communication system such as a high fidelity system or connecting the earphone of Kelsey to any audio signal processing circuitry for providing high fidelity frequency response to the device, or for providing a response that compensates for loss of external ear resonance and coupling resonance for the improved frequency characteristics.

Regarding claims 67-68, Kelsey shows the resilient sealing member (10) as claimed (figures 1 and 5).

Regarding claim 74, as best understood with regarding 112, 1<sup>st</sup> and 2<sup>nd</sup> problems as mentioned above, Kelsey shows the hollow tubular portion in the housing of the insert earphone (figure 5).

Regarding claim 75, Kelsey teaches the receiver (15) that delivers the sound to the hollow tubular portion as claimed.

6. Claims 59-68 and 73-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyahra et al. (U.S. patent 4,447,677).

Regarding claims 59 and 73, Miyahra teaches an insert earphone that comprises a housing (3, 12) having a hollow tubular portion (figure 1), a receiver (1), a sealing member (11) as claimed (figure 11). Miyahra does not specifically teach that the sealing member is a resilient material as claimed.

However, providing the earplug made of resilient material is known in the art.

Therefore, it would have been obvious to one skilled in the art to provide the earplug (11) of Miyahra device to be made of a resilient material for providing a better sealing to the ear canal of the wearer.

As shown in the drawings, the earphone of Miyahra does not require a long flexible tube between the hollow elongated tubular portion of the housing and the resilient sealing member. Miyahra does not specifically teach that the earphone provides a high fidelity response as claimed.

However, connecting a hearing aid to any communication system such as a high fidelity system or connecting a hearing aid to a circuitry or an amplifier for providing an output with high fidelity audio signals is known in the art.

Therefore, it would have been obvious to one skilled in the art to connect the hearing aid of Miyahra to any communication system such as a high fidelity system or to an audio signal processing circuitry for providing high fidelity frequency response to the device, or for providing a response that compensates for loss of external ear resonance and coupling resonance for the improved frequency characteristics.

Regarding claims 60-63, Miyahra et al. teaches a resilient material (57) as claimed (figure 1 and see col. 4, lines 33-37).

Regarding claim 64, Miyahra shows the receiver (1) that is supported within the housing (3) as claimed (figure 1).

Regarding claim 65, Miyahra shows the receiver that is supported within the housing and has a sound outlet port (54, 55) extending partially into the hollow tubular portion (12) of the housing (figure 1).

Regarding claim 66, as broadly claimed, the sound outlet port (55) extending partially into the hollow tubular portion (12) of the housing (figure 1) directly contacts a surface of the hollow tubular portion (12).

Regarding claim 67, Miyahra shows a resilient sealing member (11) that has one projecting flange portion.

Regarding claim 68, Miyahra does not show a plurality of projecting flange portions as claimed. However, the examiner takes the Office Notice that providing a plurality of flange portions for the earplug or the sealing member is known in the art.

Therefore, it would have been obvious to one skilled in the art to provide a plurality of flange portions for the earplug (11) of Miyahra for providing a better sealing and holding the device to the ear canal of the wearer.

Regarding claim 74, as best understood with regarding 112, 1<sup>st</sup> and 2<sup>nd</sup> problems as mentioned above, Miyahra shows the hollow tubular portion in the housing of the insert earphone (figure 1).

Regarding claim 75, Miyahra teaches the receiver (1) that delivers the sound to the hollow tubular portion as claimed.

7. Claims 69-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey (U.S. patent 2,430,229) or Miyahra et al. (U.S. patent 4,447,677) in view of Killion (U.S. patent 4,677,679).

Regarding claims 69-70, Kelsey or Miyahra does not teach a filter as claimed. However, it is very well known in the art to provide a filter for improving the quality sound of the hearing aid device.

Killion teaches a network circuit (40, 40a, 40a', 40b) to be connected to a receiver (21) for providing a high-fidelity response (col. 3, lines 42-50 and col. 6, lines 44-56).

Therefore, it would have been obvious to one skilled in the art to provide the network circuit or the filter, as taught by Killion, to be connected to the receiver of Kelsey or Miyahra for modifying the frequency characteristics and providing high quality sound to the device.

Regarding claim 71-72, Kelsey or Miyahra in view of Killion do not specifically teach the location of the filter as claimed.

However, the examiner takes the Office Notice that providing a network circuit or a filter in the hearing aid housing or a pocket unit such as a junction unit external to the housing is known in the art.

Therefore, it would have been obvious to one skilled in the art to provide the network or the filter, as taught by Killion, in the housing or a junction unit of the Kelsey or Miyahra hearing aid device for greater flexibility.

***Response to Arguments***

8. Applicant's arguments filed 07/27/05 have been fully considered but they are not persuasive.

Responding to the arguments about "the earphone providing a high fidelity response without requiring a long flexible tube", the examiner has explained in detail in the Office Action. As mentioned in the Office Action, the earphone of Kelsey and Miyahra do not require a long flexible tube between the hollow tubular portion of the housing and the resilient member (see figures 5 and 11 in Kelsey and figure 1 in Miyahra).

Since the rejections (on paragraph 6 of the last Office Action mailed 02/24/2005) for claims 59, 67-68 and 73 has changed to Kelsey (U.S. patent 2,430,229) for replacing Mc Cabe in view of Miyahra and further in view of Killion, this Action is made as a non-final action.

***Conclusion***

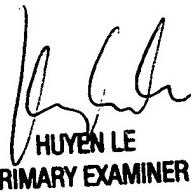
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUYEN D. LE whose telephone number is (571) 272-7502. The examiner can normally be reached on 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SINH TRAN can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HL  
January 22, 2006



HUYEN LE  
PRIMARY EXAMINER